

**DOORS • FRAMES  
HARDWARE • OPERATORS**

**THE RICHMOND FIREPROOF DOOR COMPANY**





*Since*

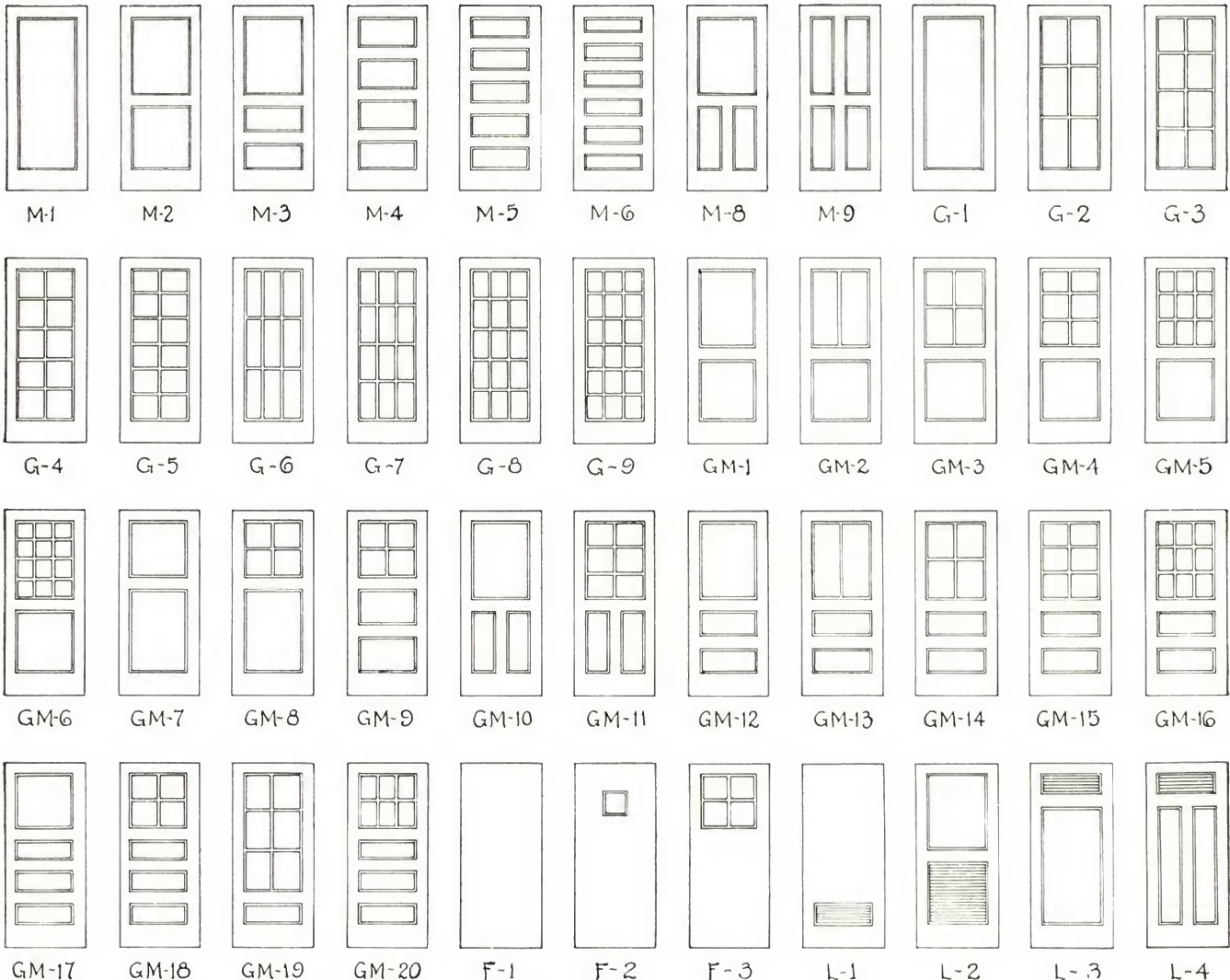
*1891 . . .*

**P I O N E E R I N G**

THE RICHMOND FIREPROOF DOOR COMPANY has spent 46 years in developing construction and production methods that meet the exacting demands of this modern age. It is a recognized leader in the field of Industrial Firedoors, Elevator Doors, Steel Frames and Hardware.

Its spacious plant and modern equipment, its highly trained organization, its central location and shipping facilities assure high grade products and prompt delivery. These advantages and its many installations in all parts of the United States presents a standing guarantee of fire protection and satisfactory service to every architect, contractor and builder.

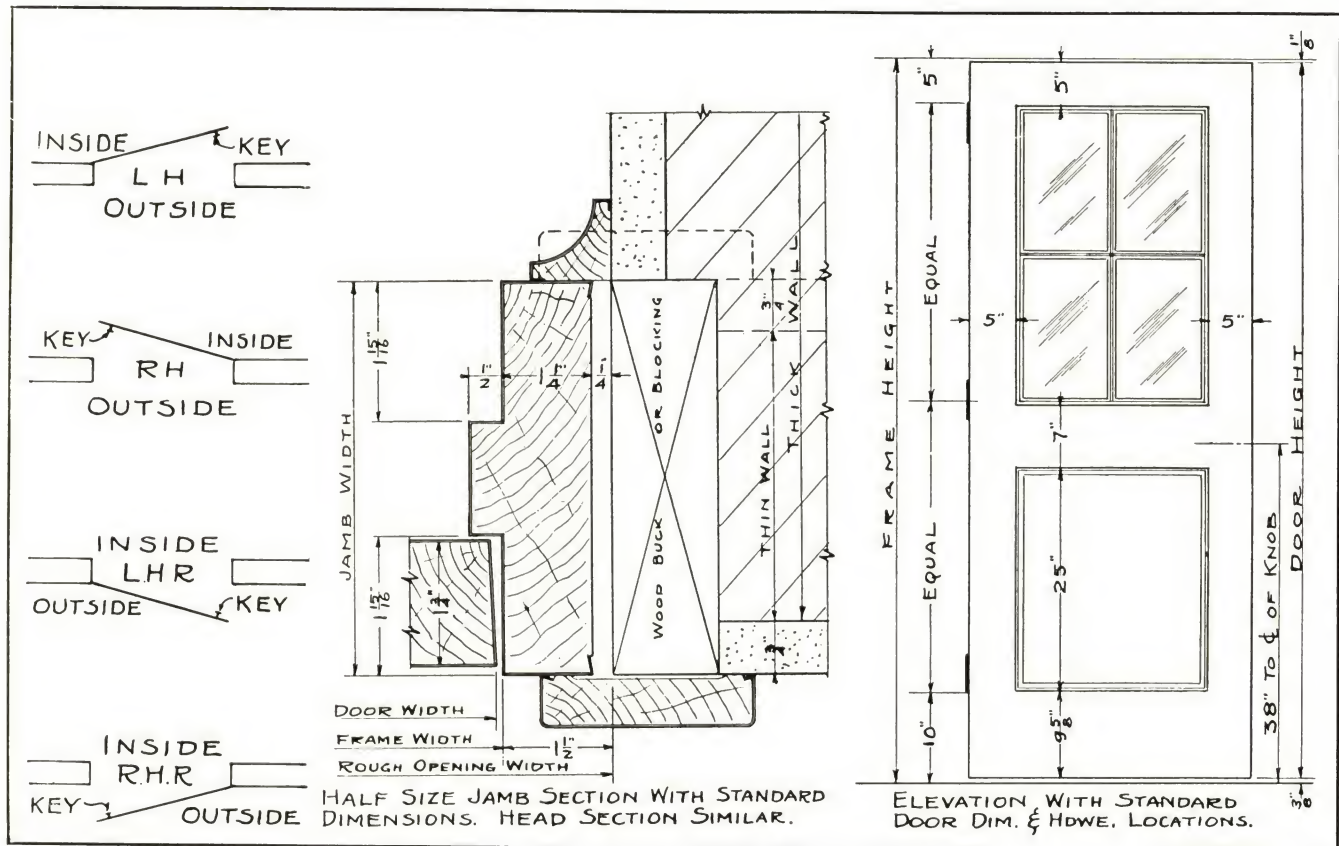
**R I C H M O N D   K A L A M E I N   D O O R S**



**SUGGESTED TYPES OF DOORS**

Many other types of doors can be developed by rearranging panel designs shown and making various panel combinations from these suggestions.

# Installation Details of KALAMEIN DOORS, FRAMES AND TRIM..



## LABELED AND NON-LABELED SPECIFICATIONS AND DETAILS

The wood cores of all Kalamein Doors to be treated with No-D-K, a termite proof appliance before priming to prevent dry rot.

All metal covered doors shall be of the "Fyrgard" type as manufactured by THE RICHMOND FIREPROOF DOOR COMPANY.

Wood cores shall be of selected non-resinous spruce or white pine, kiln dried by door manufacturer. Stiles shall extend full height of door, and rails shall be tenoned into stiles. Wood cores shall be covered with 24-gauge zinc coated sheet metal (16-oz. copper where permitted and specified) drawn tight so as to lay smooth. All joints between rail and stile metal shall be lapped and nailed to wood cores. Seams to be soldered and ground smooth.

Panels shall be covered with 24-gauge zinc coated sheet metal glued to 1/4-in. sheet asbestos (sheet rock for non-labeled doors) and held under high pressure until glue is set. Panels shall be set in hollow metal panel moulds, no nails, screws or clips to be used in moulds.

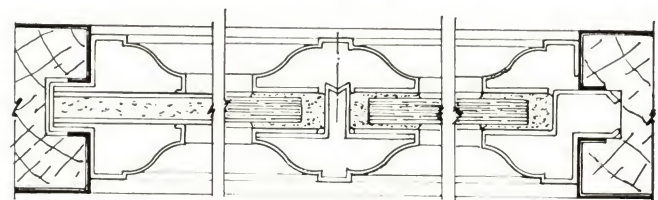
Glass shall be set in glass sash that is set in grooves of stiles and rails. Removable glass stops to be held in place with self-tapping sheet metal screws.

All doors shall be given one shop coat of gray metallic primer for galvanized iron.

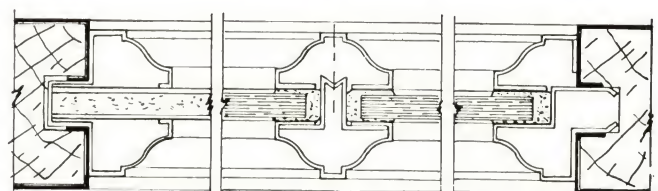
NOTE: Exposed glass area for labeled doors of this construction is limited to 225 square inches per single light.

Maximum door size all types except those with two solid panels is 3 ft. 6 in. wide by 7 ft. 6 in. high. Two panel doors limited to 3 ft. 10 in. wide by 7 ft. 6 in. high.

LABELED DOORS MANUFACTURED BY THIS METHOD COVERED BY U. S. LETTERS PATENT No. 2,021,375.



STANDARD UNDERWRITERS  
LABELED DOOR



SPECIAL LABELED (PATENTED)  
AND NON-LABELED DOORS



# Types and Sizes of

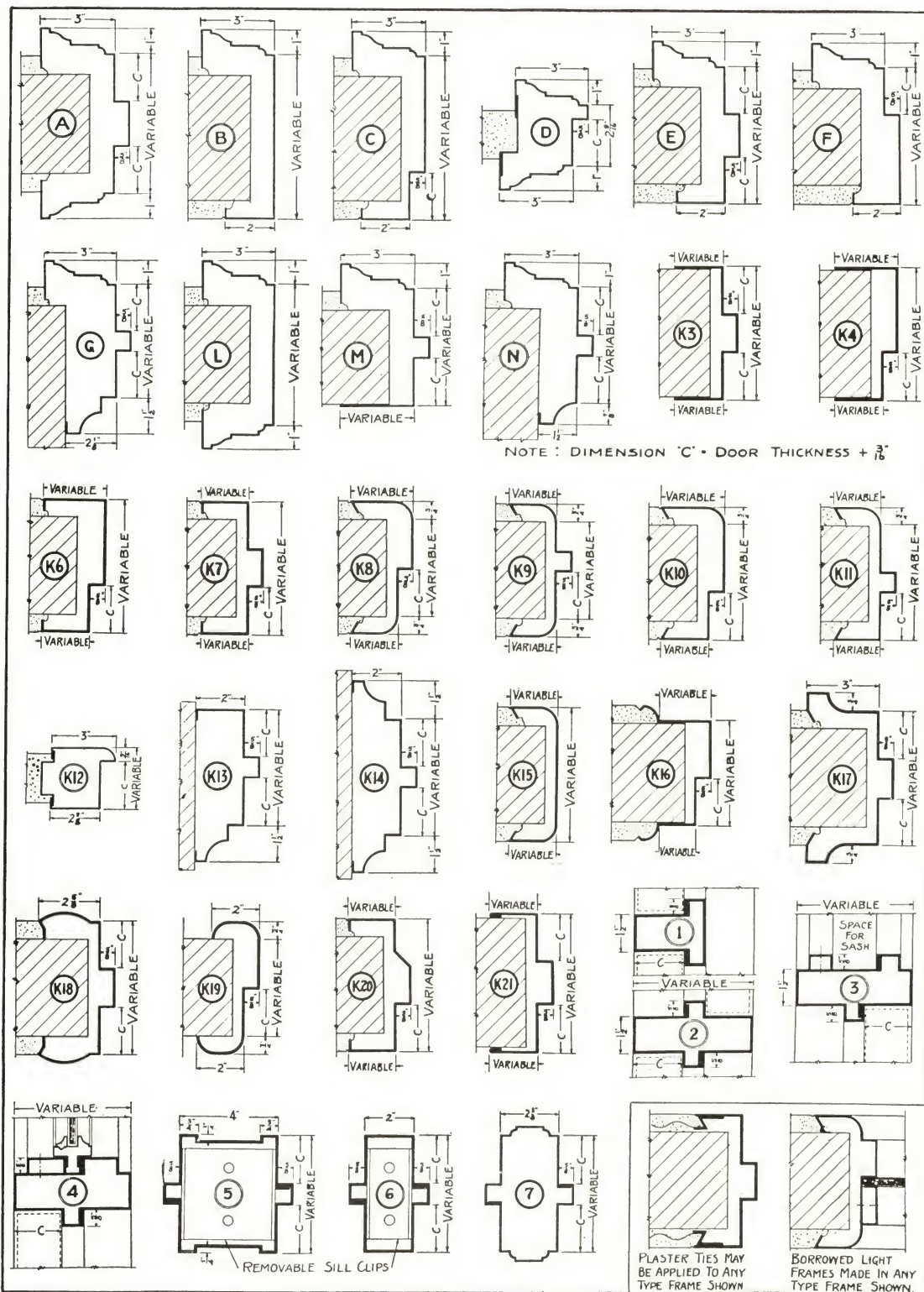
## RICHMOND DOOR FRAMES

*Note:* Many other types of frames can be developed by combining and rearranging contours and trim effects shown.

Types A, B, C, D, E, F, G, L, M, N, K12, K16, K18, K19, 5 and 7 can be made of 16 or 14-gauge only. All other types shown can be made of 10, 12, 14 or 16-gauge material.

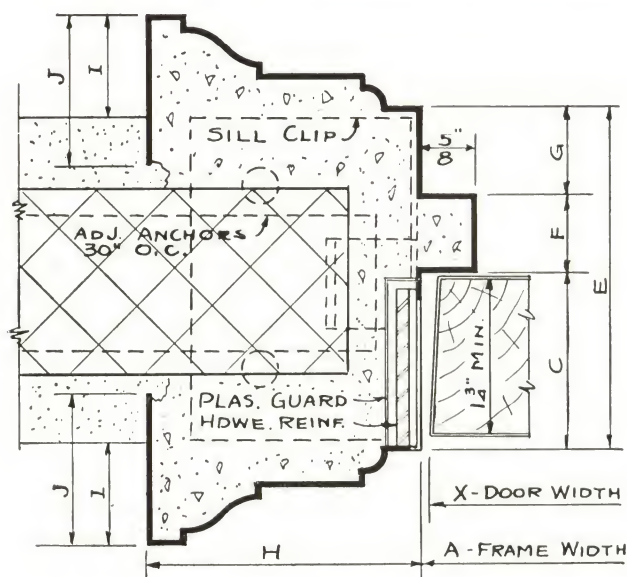
Types K3 and K4 are especially adaptable for use with rough bucks and applied casings.

All frames are rigidly reinforced to assure stability and alignment.

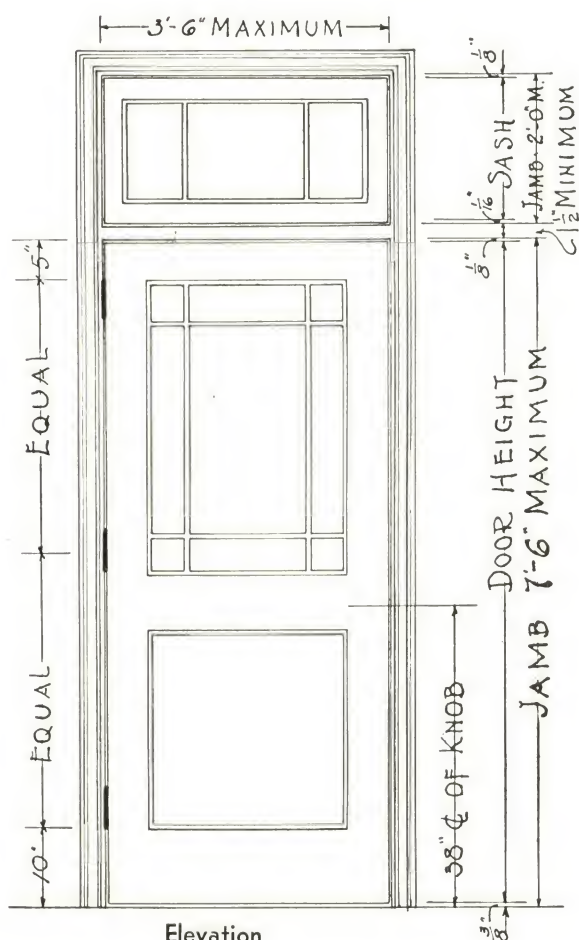


# Underwriters' Standard Dimensions

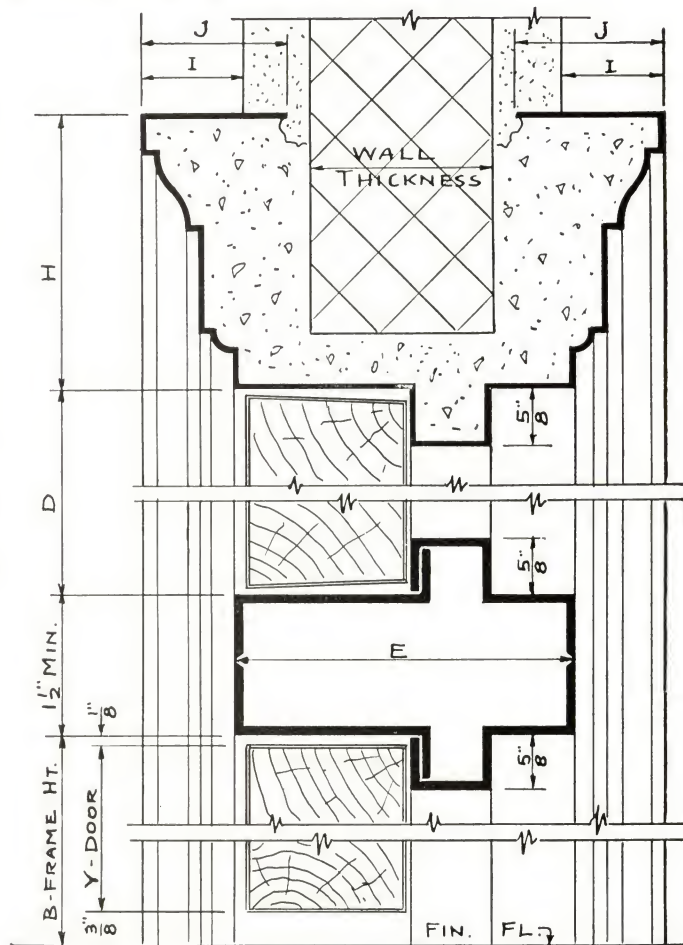
FOR RICHMOND HOLLOW METAL FRAMES WITH TRANSOM BAR FOR  
LABELED OR NON-LABELED CONSTRUCTION



Half Size Jamb Section



Elevation



Half Size Vertical Section

## STANDARD DIMENSIONS FOR LABELED FRAMES

MAXIMUM AND MINIMUM DIMENSIONS (see cut above)

- A—3-6 Single Door, 7-0 Doors in Pairs
- B—7-6 Maximum
- C—1 1/8 in. Minimum
- D—2-0 Maximum
- E—4 in. Minimum
- F—7/8 in. Minimum
- G—Variable
- H—Rolled Trim 3 in. Wide Only
- I—Variable (1 1/8 in. Standard)
- J—Variable (1 5/8 in. Standard)
- X—Dim A—1 1/8 in.
- Y—B—1/2 in.

When Threshold is provided  $Y = B - (\text{Threshold} + 1/4 \text{ in.})$ .

NOTE: Transoms may be fixed, hinged, or side pivoted. Transoms over doors in pairs must be separated by a vertical mullion.

Labeled Frames without transoms are limited to the following maximum sizes:

- 16 ga.: 3-6 x 7-6 Single Doors  
5-0 x 7-6 Doors in Pairs
- 14 ga.: 4-0 x 10-0 Single Doors  
8-0 x 10-0 Doors in Pairs



RICHMOND

# Counterbalanced

## FREIGHT ELEVATOR DOORS

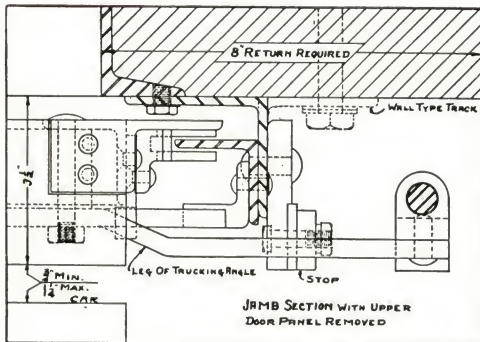
### Standard Specifications for "RICHMOND FYRGARD" LABELED Counterbalanced DOORS



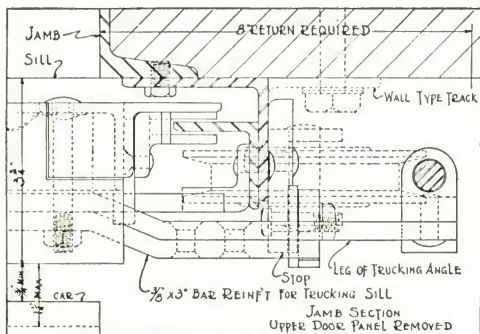
C-1 (without), CV-1 with Vision Light  
Kalamein paneled



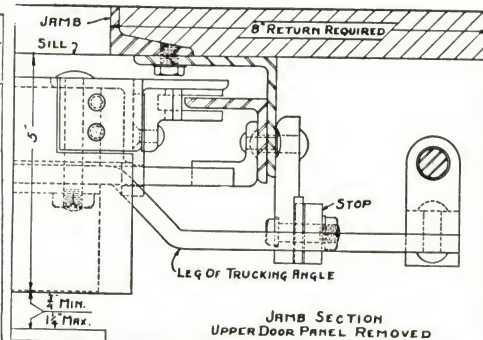
C-2 (without), CV-2 with Vision Light  
Flush panel kalamein



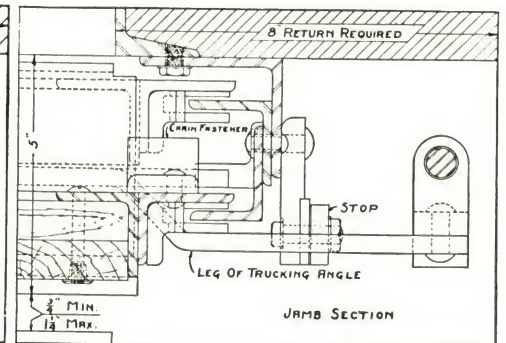
Jamb Section Regular Door



Jamb Section Regular Door Reinforced



Jamb Section Regular Door with Extended Sill



Jamb Section Pass Type Door

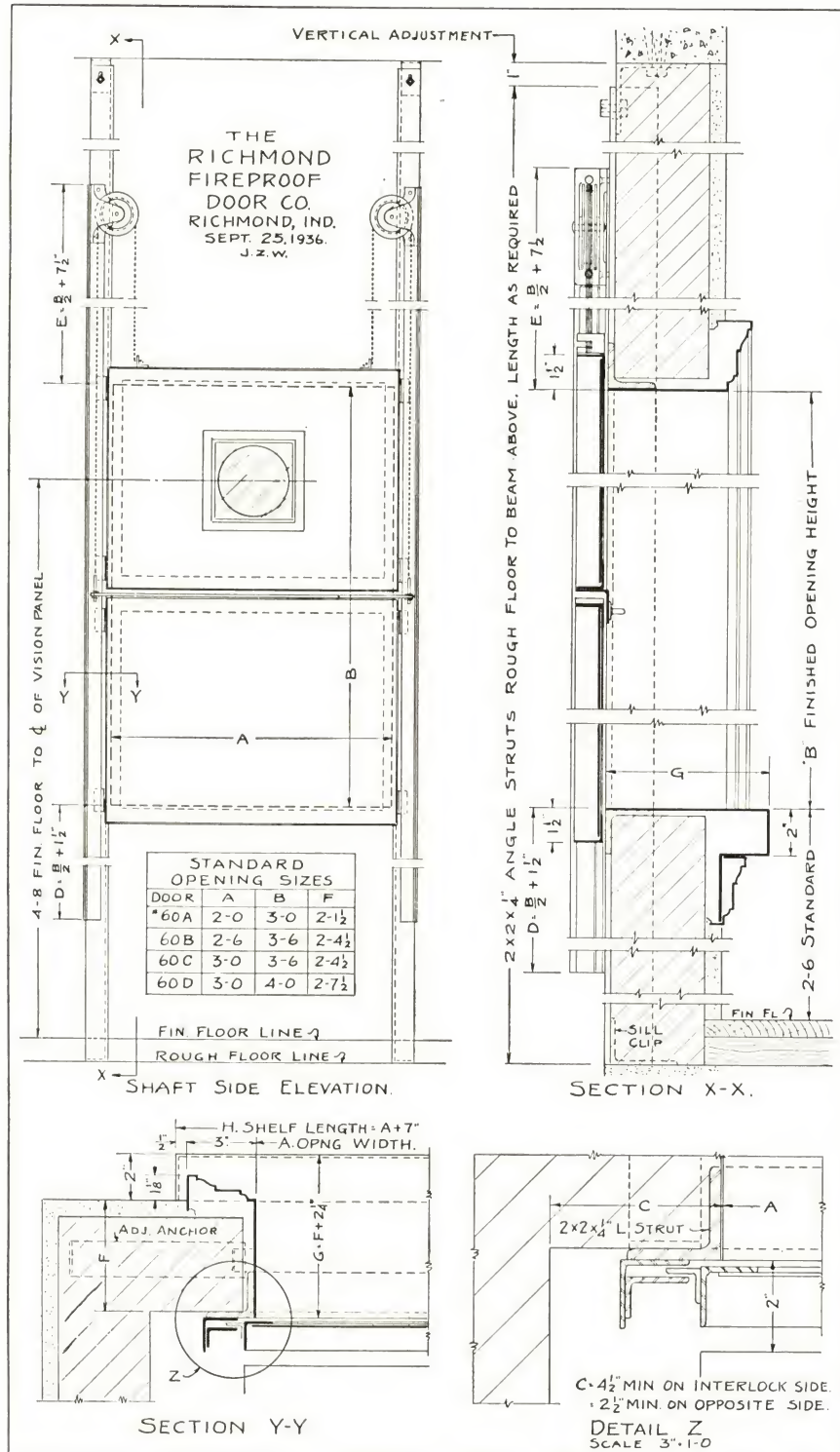
1. For all openings to freight elevator shafts, except as otherwise noted, furnish and install "Fyrgard" Counterbalanced doors manufactured by The Richmond Fireproof Door Company, of Richmond, Indiana.
2. Door paneling design to be Richmond Style—(CV-1), (CV-2).
  - (a) Door panels to be covered with 24-gauge galvanized patent leveled steel, laid smooth and free from waves and buckles, upon white pine kiln dried core. Mouldings attached with concealed clips, corners mitred and welded. Cap type vertical seams for flush doors.
  - (b) Corrugated door panels to be 18-gauge steel securely riveted to frame structure and reinforced with channel stays.
  - (c) Standard 10x10-in. approved vision panels glazed with 1/4-in. clear wire glass to be located adjacent to car control.
3. Door trucking sills to sustain a maximum load of . . . . . pounds, to rest upon rigid adjustable stops riveted to door guides.
4. Doors to be equipped with malleable antifriction milled groove guide shoes, to be hung upon 5/8-in. chain rods, and No. 6 cable chain running over 5-in. ball bearing machined malleable sheaves, and to operate in heavy structural angle guide rails, securely attached to shaft wall and opening frames.
5. (a) Doors to be provided with web strap closers for manual operation and equipped with [electro-mechanical interlocks] [Master interlocks] in accordance with car control. Interlocks shall be wired by [Door Contractor] [Elevator Contractor].
  - (b) Doors to be equipped with DM Individual electric operators and interlocks arranged for [Push Button] [Automatic] control.
  - (c) Doors to be equipped with (a) Penthouse Master Operator(s) and accessories complete arranged for [Push Button] [Automatic] control.
  - (d) Doors to be arranged for prompt, easy manual operation in case of power failure.
  - (e) Power operated doors shall be completely wired by door contractor.
6. All material shall receive a prime coat of metallic primer at factory.
7. Steel parts to be cadmium plated where desired.
8. All material to be guaranteed by The Richmond Fireproof Door Company against defective material and workmanship for a period of two years from date of installation.



**RICHMOND**

# Counterbalanced DUMBWAITER DOORS

RICHMOND COUNTERBALANCED DUMBWAITER DOORS are complete units ready to be set and walled in place. Each unit consists of the opening frame, supporting struts, door panels and guides, unless otherwise specified. Vision Panels and Frame Shelf are optional. Suitable Interlocks furnished when specified.



Doors can be made with Steel, Aluminum, Stainless Steel, or Steel Cadmium Plated

## Specifications

1. For all openings to dumbwaiter shafts, except as otherwise noted, furnish (and install) "Fyrgard" Counterbalanced Dumbwaiter Doors, manufactured by THE RICHMOND FIREPROOF DOOR COMPANY of Richmond, Indiana.

2. Doors to hang upon ball bearing sheaves with suitable flexible chain and to operate in substantial guides.

3. Opening frames to be (rolled) (pressed) metal with (without) shelf attached, mounted upon structural steel struts extending from floor to beam above.

4. Doors to have circular vision panels glazed with  $\frac{1}{4}$ -in. clear wire glass.

5. Doors to be equipped with suitable interlocks to prevent operation of car until all doors are closed.

6. Doors to be finished in gray metallic prime coat at factory.

7. Units to be assembled complete ready for installation and guaranteed by the manufacturer against defective material and workmanship for a period of two years.



Room Side View  
Steel Plate Door

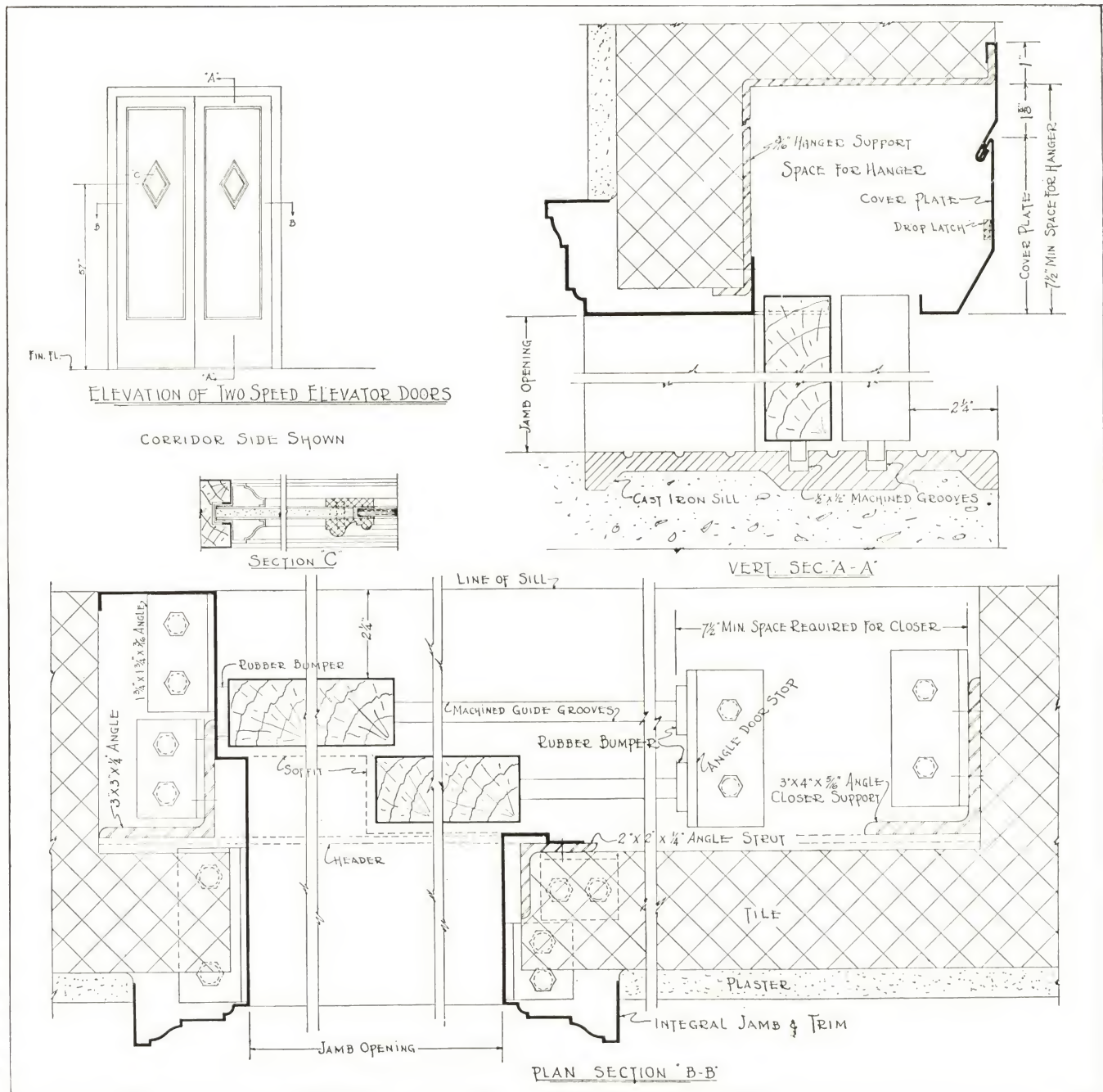
# RICHMOND *Passenger* ELEVATOR DOORS . . .

These doors have been especially designed to meet the needs of efficient passenger elevator service. Their quietness of operation is especially noticeable.

The wood cores of these doors, heavily reinforced where necessary, assure the rigidity so essential in withstanding the terrific strain and shock placed upon doors designed to open and close in only a matter of seconds.

The light gauge metal which is used for Kalamein doors makes possible the sharp lines so desirable in carrying out architectural design.

This type of door is adaptable to single, two and multiple speed, sliding, center parting and combination slide and swing units. We are prepared to furnish these doors with hardware, opening frames (see page 4) and sills and equip them with "DM" Electric operators.



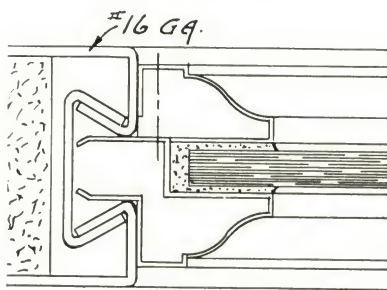


# RICHMOND *Hollow* METAL DOORS . . .

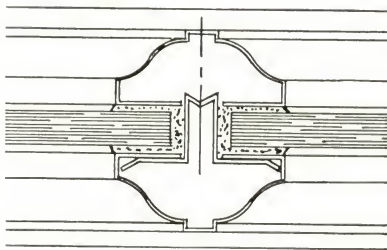
A building is only as fireproof as its doors. Fire control is as important as fire prevention. Hollow Metal Doors as manufactured by THE RICHMOND FIRE-PROOF DOOR COMPANY retards a fire and helps to confine it to the area in which it starts.

More than 40 types of doors have been shown on page 2 of this catalog to meet the needs of the architect and builder. The architecturally designed profiles of the mouldings present a wide range of styles. Practically any design can be developed from various combinations.

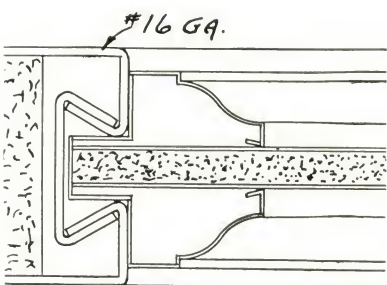
Doors, frames and trim are made from the finest grade of cold rolled steel. Each design is carefully worked out to produce well formed lines and contours that create a beautifully finished unit. All parts of the doors and frames are heavily reinforced where necessary. Mouldings and muntin bars are accurately mitered and welded to form invisible joints.



SECTION A-A  
Full Size



SECTION B-B  
Full Size



SECTION C-C  
Full Size

Our highly trained engineers and designers are at the service of architects and builders in working out special problems in construction or design.

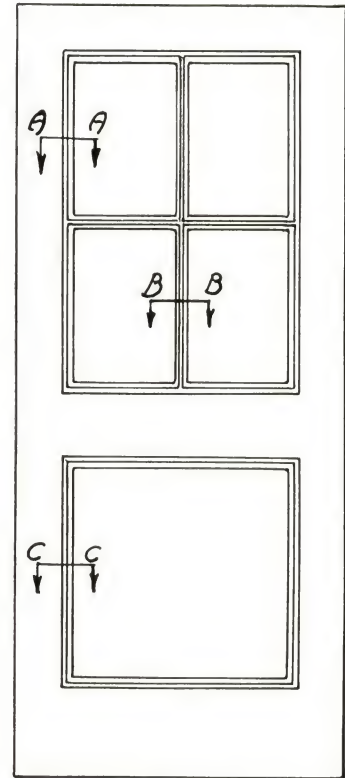
## *Specifications*

**WORKMANSHIP:** All Hollow Metal doors shall be in strict accordance with the established standards of high grade construction and workmanship as developed by THE RICHMOND FIREPROOF DOOR COMPANY. They shall be neat and clean in appearance, free from defects, delivered and erected in a satisfactory manner by skilled mechanics.

**MATERIAL:** Doors, frames and trim shall be of the best cold rolled, patent leveled furniture steel, free from scale or pits of U. S. Standard gauges as specified.

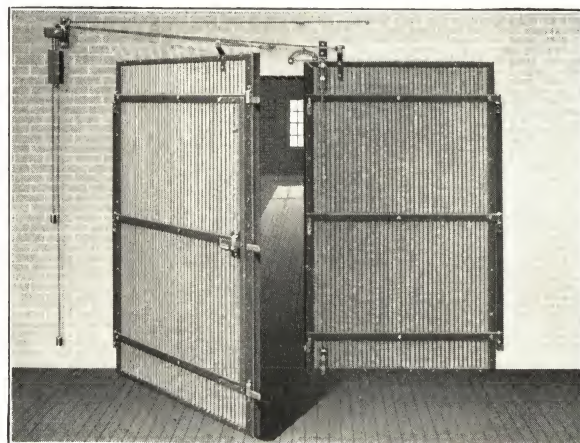
**CONSTRUCTION:** Stiles and rails of doors to be made from 16 gauge steel, insulated with cork to deaden sound. All joints to be carefully fitted, reinforced and properly welded to form an invisible seam.

Cold rolled mouldings to be mitered and welded into a frame with asbestos lined metal panels inserted. Where glass panels are required, mouldings to be welded into frames with one side removable. These moulded frames are recessed into the stiles and rails and securely fastened to them to form an integral part of the door. Stiles, rails and panels must be free from waves and buckles and finished clean and smooth. Doors and frames to be rigidly reinforced to assure stability and alignment. Proper provision to be made for mortising and reinforcing for hardware.

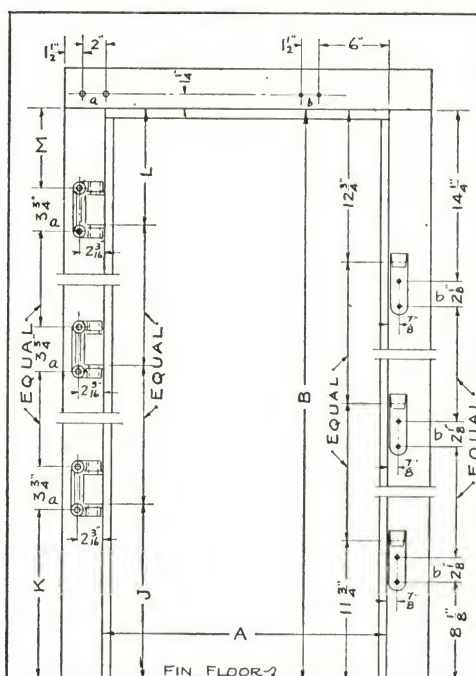


Elevation

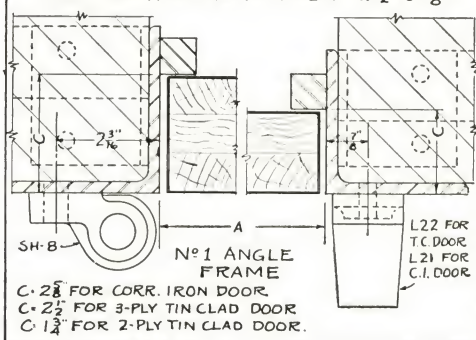




No. 335 DOORS AND HARDWARE (Corrugated Iron)

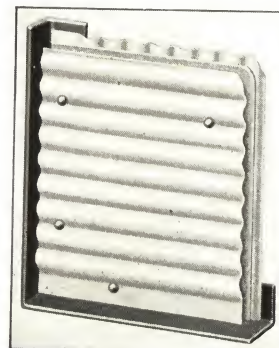


ELEVATION  
FOR TIN CLAD DOORS - J.  $14\frac{3}{4}$ " K.  $14\frac{3}{16}$ " L.  $9\frac{3}{4}$ " M.  $6\frac{9}{16}$ "  
FOR CORR. IRON DOORS - J.  $11\frac{3}{4}$ " K.  $11\frac{3}{16}$ " L.  $12\frac{5}{8}$ " M.  $9\frac{9}{16}$ "  
HOLES FOR RIVETS OR CAP SCREWS - a =  $4\frac{1}{2}$ " b =  $3\frac{1}{2}$ "



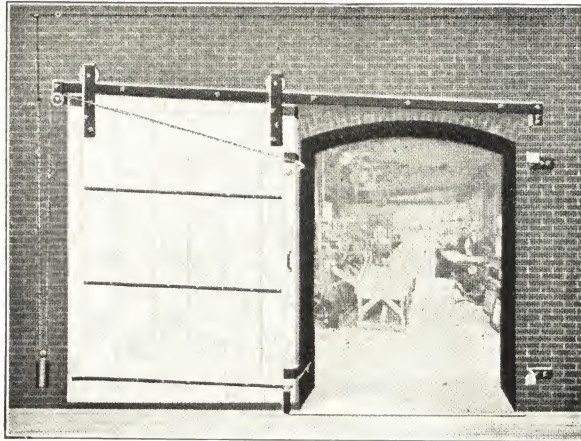
**Note:** Angle Frames cannot be labeled.

If conditions are not Standard, consult Home Office or nearest Richmond Branch Office or Representative.



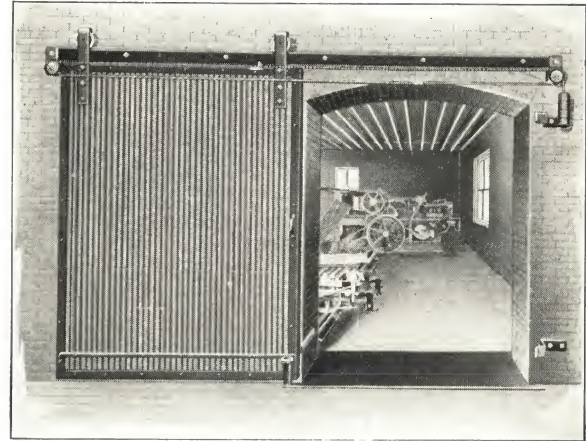


# RICHMOND Automatic SLIDING FIRE DOORS...



No. 200A DOOR AND HARDWARE

No. 200A Door—Tin clad.  
No. 400A Corrugated door similar, standard incline track types.  
Universally used where ample headroom and returns are available.  
Simple to install and operate.



No. 405 DOOR AND HARDWARE

No. 405 Corrugated door.  
No. 205 Tin clad door similar, standard level track types.  
Used where limited headroom will not permit use of No. 200A or 400A. Numbers 406 and 206 with closing and counterweights furnished where No. 405 and No. 205 are not approved.

## STANDARD HEADROOM REQUIREMENTS

Sliding Doors Nos. 205, 405: 14-in.  
Nos. 200A and 400A Inclined Track, per following schedule:

Width of opening	Req. head-room	Width of opening	Req. head-room	Width of opening	Req. head-room
2' 0"	17 3/4"	6' 0"	23 3/4"	10' 0"	29 3/4"
2' 4"	18 1/4"	6' 4"	24 1/4"	10' 4"	30 1/4"
2' 8"	18 3/4"	6' 8"	24 3/4"	10' 8"	30 3/4"
3' 0"	19 1/4"	7' 0"	25 1/4"	11' 0"	31 1/4"
3' 4"	19 3/4"	7' 4"	25 3/4"	11' 4"	31 3/4"
3' 8"	20 1/4"	7' 8"	26 1/4"	11' 8"	32 1/4"
4' 0"	20 3/4"	8' 0"	26 3/4"	12' 0"	32 3/4"
4' 4"	21 1/4"	8' 4"	27 1/4"	12' 4"	33 1/4"
4' 8"	21 3/4"	8' 8"	27 3/4"	12' 8"	33 3/4"
5' 0"	22 1/4"	9' 0"	28 1/4"	13' 0"	34 1/4"
5' 4"	22 3/4"	9' 4"	28 3/4"	13' 4"	34 3/4"
5' 8"	23 1/4"	9' 8"	29 1/4"	13' 8"	35 1/4"

## STANDARD RETURNS REQUIRED

Sliding Doors Nos. 200A, 400A, 205, 405. Return at opening jamb (past which door slides when opened). Opening width plus 20 in. Return at closing jamb, 14 in.

## SPECIFICATIONS TINCLAD DOORS

CORE: Well seasoned white pine, fir, or spruce, tongue and grooved, dressed both sides to 3/4-in. two or three-ply as indicated by the plans, assembled with standard cut iron nails.

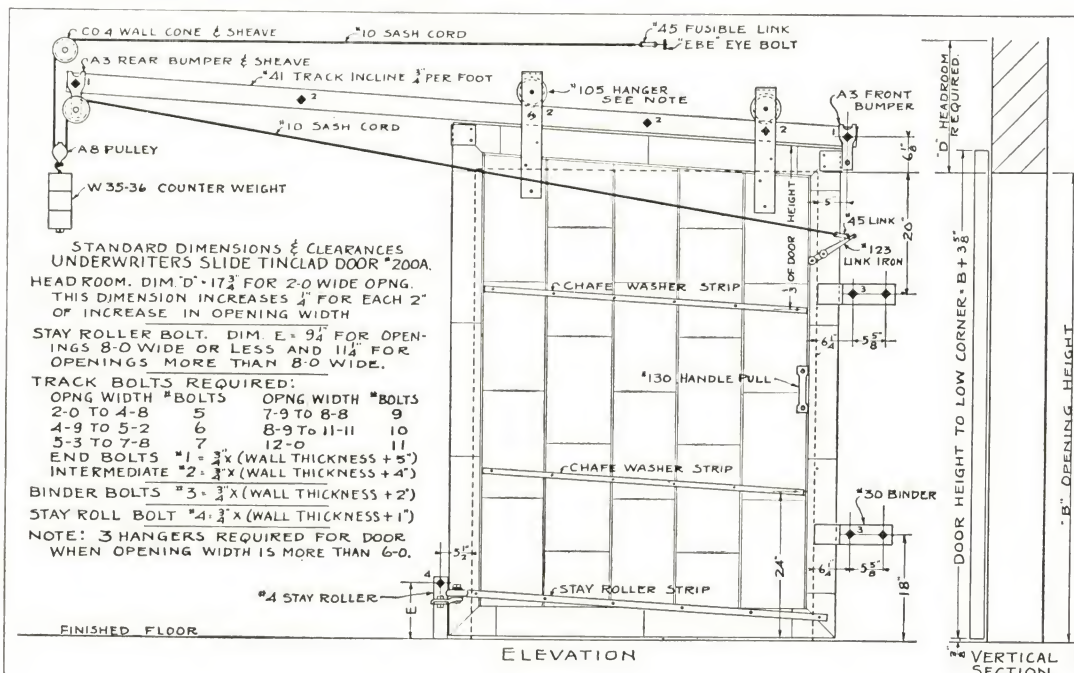
COVERING: Standard I. C. 20 pound fire door terne plate laid flat to core. All seams locked. All in accordance with Underwriters' Standards.

## CORRUGATED STEEL DOORS

DOOR PANEL FRAME: to be 2 1/2 x 2 x 3/16-in. angle mitre notched, bent, and welded.

PANEL: to be layers of 24-gauge galvanized corrugated steel laid with corrugations of one layer at right angles with those of the other with a 1/8-in. thick layer of sheet asbestos between. Panels to be riveted to frame. Sliding doors to be provided with track binder angle.

Doors to be manufactured by The Richmond Fireproof Door Company of Richmond, Indiana, and bear the Underwriters' label.





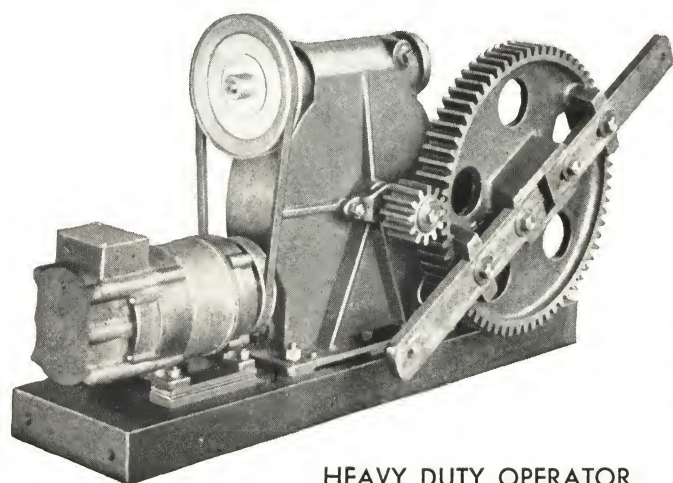
# RICHMOND *Electric*

## DOOR OPERATORS . . . .

Many attempts have been made to apply power operators to Bi-Fold Doors, but Richmond has developed and patented the only successful, positive and automatic method. The same movement of the operator arm that breaks the door from its closed position, if continued, also opens it to full height of opening. The reverse movement of the operator arm closes the door and holds it so tightly against the jambs that no additional catch or locking device is required.

Many old installations of Bi-Fold Doors may be motorized by the Richmond "DM" Operator method with little or no changes in existing equipment, regardless of who manufactured them originally. If doors are large, they should be fitted with new ball bearing hardware.

Consult your nearest Richmond Agency or write Home Office for further details.



HEAVY DUTY OPERATOR

### RICHMOND TYPE "DM" ELECTRIC OPERATORS

#### AN OPERATOR FOR EVERY PURPOSE

The operator illustrated below is shown with crank arms for Swing Fold Doors. By substituting suitable arms and linkage the operator may be used for Bi-Fold doors as shown in cut above.

This unit will operate practically any type of door when provided with proper operating equipment.

## *Specifications*

The Power Unit to be Richmond Type "DM" manufactured by THE RICHMOND FIREPROOF DOOR CO. All parts to be made to standard dimensions, using template jigs, to permit replacement of parts and insure perfect fitting of all parts in machines of same size.

MACHINE BASE: To be made from 10-in. structural channel and

heavy steel plates welded thereto. Motor, brake and speed reducer to be attached to base with cap screws fitted with lock washers.

MOTOR: To be totally enclosed (.....) Volt (.....) Phase (.....) Cycle A.C. Squirrel cage induction type, instantly reversible, high starting torque; to develop not less than (.....) foot pounds when installed.

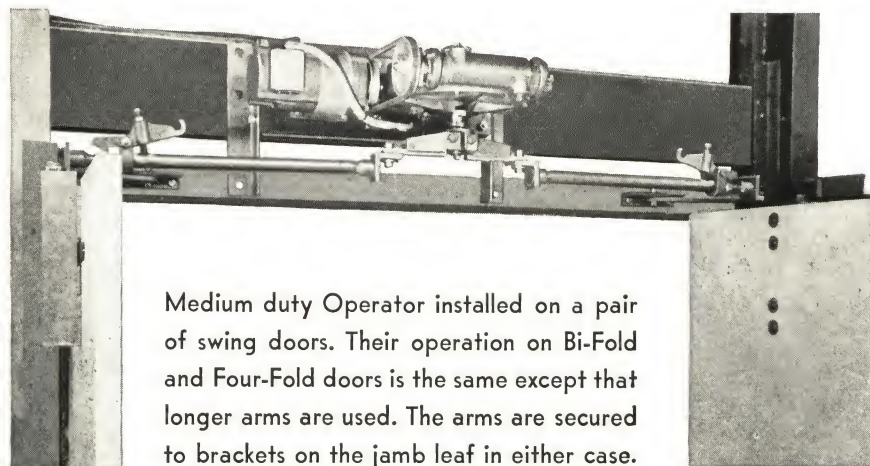
NOTE: Polyphase A.C. power supply preferred in all cases, but single phase A.C. or D.C. motors may be furnished at increased cost.

Motor shaft to run in precision ball bearings.

BRAKE: To be two disc type. Rotating disc to be securely pinned to motor shaft, and carefully balanced. Brake disc to be faced with special friction material.

Brake to be applied by spring pressure and released by electro-magnets. (A.C. magnets to have laminated cores with damping rings to prevent humming noise.)

Entire brake and releasing magnets to be totally enclosed in motor end bell.



Medium duty Operator installed on a pair of swing doors. Their operation on Bi-Fold and Four-Fold doors is the same except that longer arms are used. The arms are secured to brackets on the jamb leaf in either case.



# Specifications of RICHMOND Swing-Fold DOORS

## FOR HEAVY DUTY

**DOOR SECTIONS:** Stiles and Rails—to be  $2\frac{3}{4}$ -in. thick, 2-ply White Pine or Sitka Spruce glued and blind screwed together. Joints between members to be double mortised and tenoned. Bottom edges of panel and sash openings to be lined with oak watersheds.

**Panels**—To be  $1\frac{1}{8}$ -in. thick tongue and groove "V" grooved White Pine or Fir Ceiling.

**Sash**—To be White Pine, moulded into openings, muntin bars machined from solid stock with loose glass mould to match.

**Design**—Panel and sash combination to be as shown on plans.

**HARDWARE:** Hinges—Three, four or six high for each leaf (see plans). To be malleable iron and steel, weather-proof, full ball bearing, spring cushioned, with vertical screw adjustment, grease gun lubrication and weather proof.

**Jamb Hinges**—Jamb leaf to be attached to jamb with four bolts or cap screws. The door leaf to be provided with two 6-in. steel straps to extend across both faces of Jamb Door-Section and be through bolted thereto.

**Center Hinges**—Female leaf to be riveted to exterior strap of jamb hinge. The male leaf to be provided with a 3-in. steel strap to extend across exterior with a companion washer strip on interior of Suspended Door Leaf and through bolted thereto.

**Trusses**—Diagonal I-Beam trusses and all required reinforcing to prevent distortion and warpage of door sections to be provided.

**Astragal**—All four section doors to be provided with Rubberized fabric and 5-in. steel plate astragals.

**NOTE:** For more complete specifications and data write Home Office or consult local representative.

## FOR MEDIUM DUTY

**DOOR SECTIONS:** Stiles and Rails—To be  $2\frac{1}{2}$ -in. thick solid White Pine or Sitka Spruce, machined with integral mouldings. Joints between members to be mortise and tenon, reinforced with hardwood dowels.

**Panels**—To be  $\frac{3}{4}$ -in. thick tongue and groove "V" grooved fir ceiling, set in grooves in stiles and rails.

**Sash**—Glass openings to be formed by integral moulding in the stiles, rails, mullions and muntin bars with loose glass moulds to match.

**Design**—Panel and sash combination to be as shown on plans.

**HARDWARE:** Hinges—To be malleable iron and steel, weatherproof, full ball bearing and spring cushioned, with vertical screw adjustment and grease gun lubrication.

**Jamb Hinges**—Jamb leaf to be attached to jamb with four bolts or cap screws. The door leaf to be provided with two 3-in. steel straps to extend across both sides of Jamb Door Section and be through bolted thereto.

**Center Hinge**—Female leaf to be riveted to exterior strap of jamb hinge. The male leaf to be provided with a 3-in. steel strap to extend across exterior with a companion washer strap on interior of Suspended Door Leaf and be through bolted thereto.

**Trusses**—Where size of door requires, suitable trusses and reinforcements to be provided.

**Astragal**—All four section doors to be provided with Rubberized fabric and 5-in. steel plate astragals.

**NOTE:** For more complete specifications and data write home office or consult local representative.

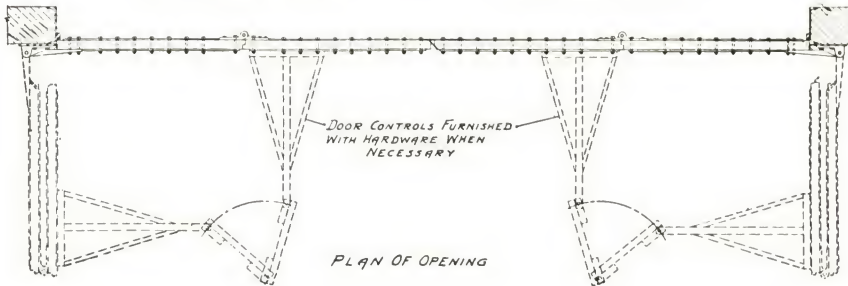
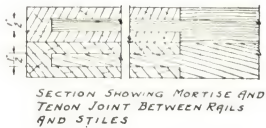
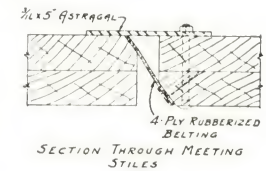
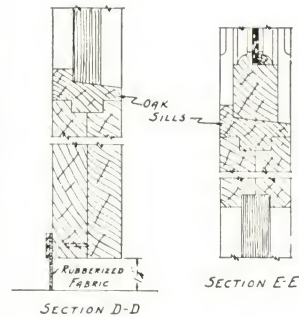
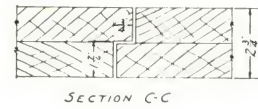
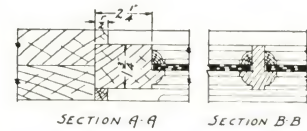
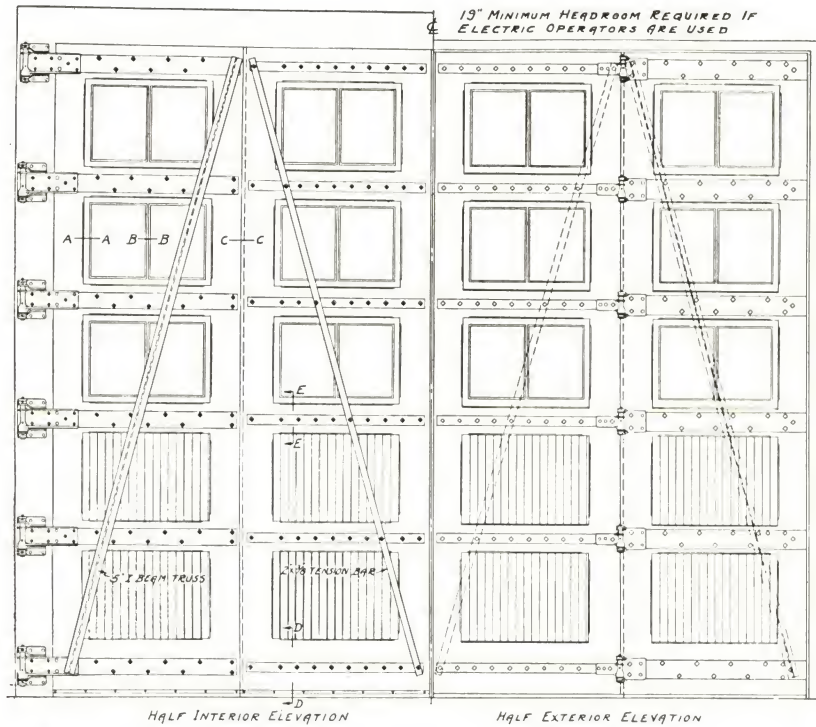


MEDIUM DUTY SWING-FOLD DOORS

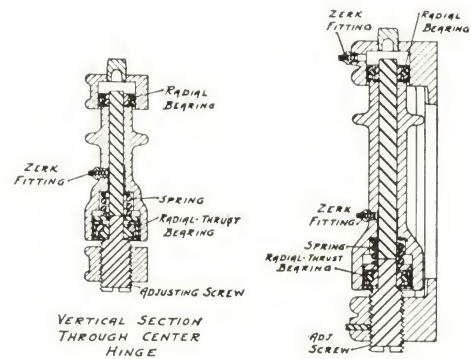
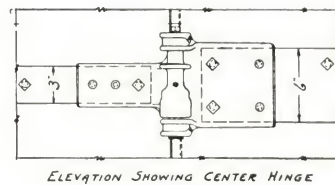
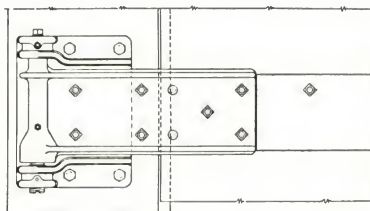


RICHMOND

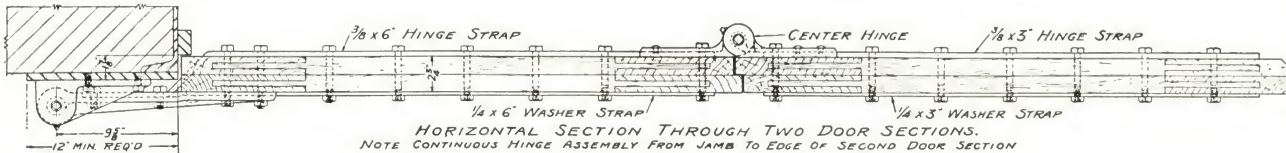
# Swing-Fold DOORS



NOTE  
DOORS ARE MADE OF 2 PLY  
WHITE PINE BLIND SCREWED  
AND GLUED TOGETHER



SWING-FOLD DOORS AND HARDWARE

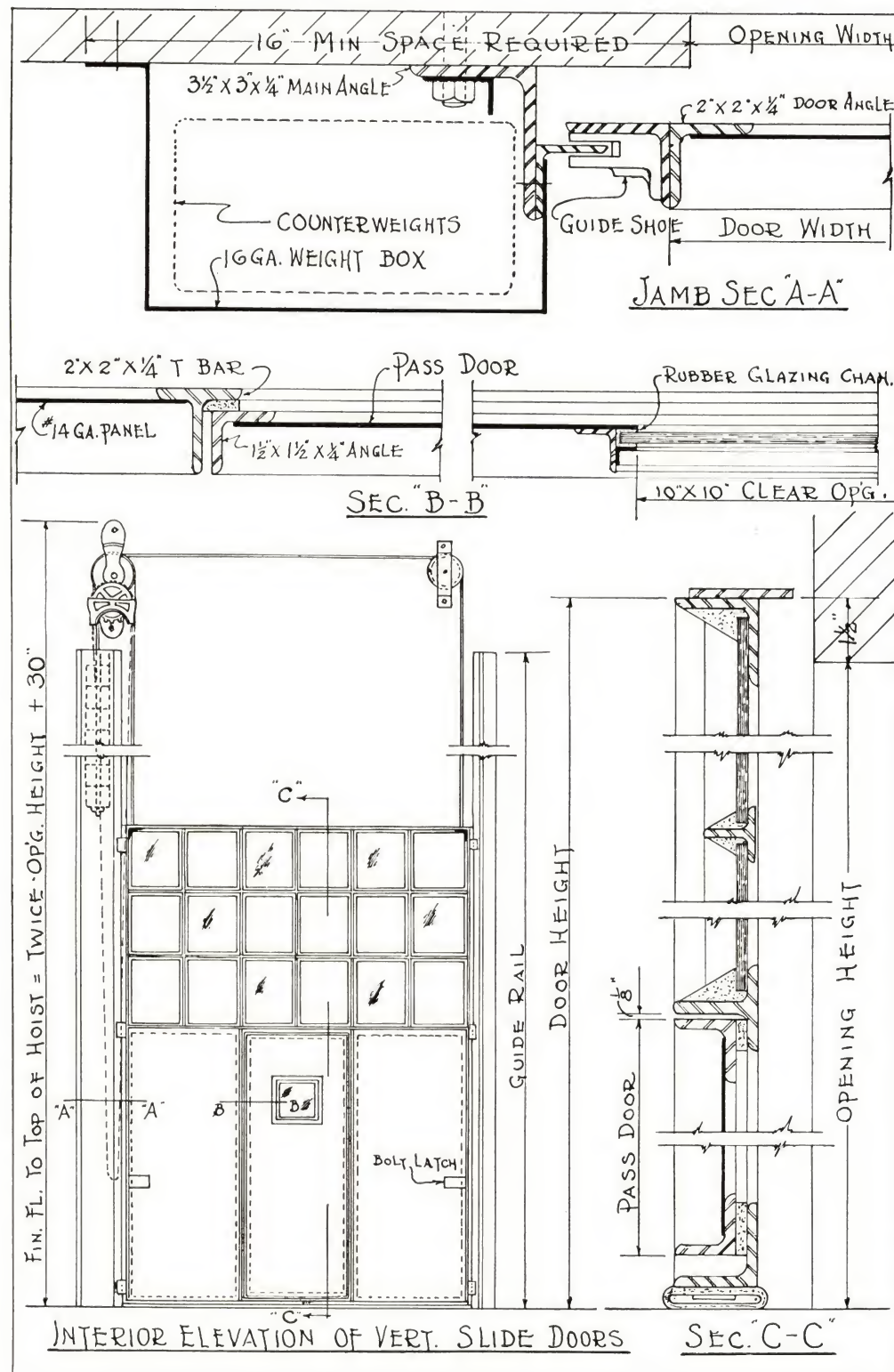




# RICHMOND *All-Steel*

## INDUSTRIAL VERTICAL SLIDE DOORS

This type of door is used where there is not sufficient return on either side of the opening to accommodate doors of the sliding types and where it is not desired to reserve the floor space required by a swinging door.



### Specifications

Provide a 16-in. return on one side of opening only as space for weight pocket and door track where hoist is used to operate doors. Provide 6 $\frac{3}{4}$ -in. space on opposite side of opening for track only.

Door tracks to be made of structural angles.

Guide shoes to be provided with ball bearing rollers.

Hoist and sheaves to have bronze bushing or provided with ball bearings where required.

Openings not over 8 ft. in height can be manually operated and to be provided with webb closer straps to close doors when out of reach.

Pass door as shown furnished only where required.

Lower half of door to be of steel plate construction.

Upper half of door to have glass panels with T bar muntins.

This equipment can be completely cadmium plated at slight extra cost.





# THE RICHMOND

## FIREPROOF DOOR COMPANY

### RICHMOND • INDIANA

*Branch Offices • Agents • Representatives*

- AKRON, OHIO, Fred J. Crisp, Inc., 710 N. Main St.  
 ALBUQUERQUE, NEW MEX., A. C. Weigerding, P. O. Box 173  
 ALLENTOWN, PA., Geo. K. Halteman & Co., Allen & St. Cloud Sts.  
 AMARILLO, TEXAS, Jenkins Mantel & Brick Co., 816 Harrison St.  
 ASHEVILLE, N. C., General Bldg. Products Co., J. A. Thompson  
 ATLANTA, GA., E. P. Hoffman, 212 Red Rock Bldg.  
 ATLANTIC CITY, N. J., Building Supply Co., 1207 Atlantic Ave.  
 BALTIMORE, MD., Wm. E. Gambrill & Co., 213 East St.  
 BINGHAMTON, N. Y., Babcock, Hinds & Underwood, 174 Washington St.  
 BIRMINGHAM, ALABAMA, D. P. Barrett Co., 320 Brown Marx Bldg.  
 BLUEFIELD, W. VA., Bluefield Hardware Co.  
 BOISE, IDAHO, J. G. Doerr, 501 S. 8th St.  
 BOSTON, MASS., H. W. Pedersen, 131 State St.  
 BUCYRUS, OHIO, Patterson Iron & Wire Works  
 BUFFALO, N. Y., Shults Engr. Co., Morgan Bldg.  
 CAMBRIDGE, OHIO, Hanse H. Griswell, 306 N. 7th St.  
 CANTON, OHIO, L. G. Peter, 715 Shorb Ave., N. W.  
 CHARLESTON, S. C., Carolina Supply & Cement Co.  
 CEDAR RAPIDS, IOWA, O. W. Latimer & Co., 701 Security Bldg.  
 CHARLOTTE, N. C., R. R. Robertson, 212 Latta Arcade, P. O. Box 56  
 CHATTANOOGA, TENN., Currin-Andrews Co., 821 East 11th St.  
 CHICAGO, ILL., The Richmond Fireproof Door Co., 130 N. Wells St.  
 CINCINNATI, OHIO, Durbrow & Otte, 1424 Clay St.  
 CLEVELAND, OHIO, The Richmond Fireproof Door Co., 405 Caxton Bldg.  
 COLUMBIA, S. C., Columbia Steel Co., P. O. Box 741  
 COLUMBUS, OHIO, Alvan Tallmadge, 63 Parkwood Ave.  
 DALLAS, TEXAS, Maisey & Paige, 208 Construction Bldg.  
 DAVENPORT, IOWA, Austin Crabbs, Inc., 715 East River St.  
 DAYTON, OHIO, Dayton Fabricated Steel Co., 1300 E. Monument Ave.  
 DECATUR, ILLINOIS, C. J. Gandy, 245 N. Westlawn Ave.  
 DENVER, COLO., Colorado Bldrs. Supply Co., 1534 Blake St.  
 DES MOINES, IOWA, Des Moines Stair Co., 610 Polk Bldg.  
 DETROIT, MICH., The Richmond Fireproof Door Co., 2211 Woodward Ave.  
 DULUTH, MINN., H. D. Bullard, 410 Builders Exchange  
 ELMIRA, N. Y., Elmira Bldg. Units, Inc., 1898 Grand Central Ave.  
 EL PASO, TEXAS, C. C. Gaines, 1002 Mills Bldg.  
 ERIE, PA., Geo. H. Kraft & Son, 602 Schenley Drive  
 FLINT, MICHIGAN, Flint Iron & Wire Works  
 FT. WAYNE, IND., Jones & Moss, 215 Standard Bldg.  
 FT. WORTH, TEX., Chas. F. Williams Co., Inc., 328 Lipscomb St.  
 GRAND RAPIDS, MICH., Haven-Busch Co., 501 Front Ave., N. W.  
 GREAT FALLS, MONTANA, Harold R. Hewitt, 3500 Fourth Ave., N.  
 GREENSBORO, N. C., J. D. Wilkins, W. Lee St. at Glenwood Ave.  
 GREENVILLE, S. C., Frank R. Henry Co., Masonic Temple  
 HARRISBURG, PA., Atherton Bowen, 222 North St., P. O. Box 853  
 HOUSTON, TEX., Maisey & Paige, 2911 Dalton St.  
 HUNTINGTON, W. VA., James J. Weiler & Sons, 202 Elm St.  
 INDIANAPOLIS, IND., Stackhouse Bldg. Spec. Co., 6117 College Ave.  
 JACKSONVILLE, FLA., Louis Aichel, c/o Florida Brick & Tile Co.  
 JOHNSON CITY, TENN., Eustis A. Lancaster, Jr., John Sevier Hotel Bldg.  
 KANSAS CITY, MO., E. C. Marqua Co., 2728 Jarboe St.  
 KNOXVILLE, TENN., R. G. Jefferies, 409 Clinch Ave.  
 LOS ANGELES, CALIF., Kenneth C. Gaines, 1046 S. Olive St.  
 LOUISVILLE, KY., Equipment & Supply Co., 420 Baxter Ave.  
 MANSFIELD, OHIO, Mansfield Structural Erecting Co.  
 MARIETTA, OHIO, E. A. Williams Bldg. Service Co., 200 St. Clair Bldg.  
 MEMPHIS, TENN., Mr. J. W. Peete, 1639 Vance Ave.  
 MIAMI, FLA., The Aufford Kelley Co., 144 N. E. 21st St.  
 MIAMI, TEXAS, Chas. F. Williams Co., 311 W. Florida St.  
 MILWAUKEE, WISC., Wm. M. Heinz, 720 N. Jefferson St.  
 MOBILE, ALA., Underwood Coal & Supply Co.  
 NASHVILLE, TENN., John Williams, Room 1207 Warner Bldg.  
 NEW HAVEN, CONN., Hans Dumelin, 295 Sherman Ave.  
 NEWARK, N. J., Yunker Metal Products Co., 17 Cypress St.  
 NEW ORLEANS, LA., Nachary Bldrs. Supply Co., 318 Carondelet St.  
 NEW YORK, N. Y., The Richmond Fireproof Door Co., 1 E. 42nd St.  
 NORFOLK, VA., Globe Iron Construction Co., Princess Anne Rd. & Park Ave.  
 OKLAHOMA CITY, OKLA., Town-Sco Equip. Co., 211 N. W. 10th St.  
 OMAHA, NEBRASKA, Earl S. Lewis, 601 Redick Tower  
 ORLANDO, FLA., A. N. Goodwin, P. O. Box 1104  
 PADUCAH, KY., Paducah Iron Co., 216 So. 1st St.  
 PEORIA, ILL., Samuel J. Smith & Co., 510 Lehmann Bldg.  
 PHILADELPHIA, PA., N. R. Guilbert, Jr., 1722 Sansom St.  
 PHILADELPHIA, PA., H. A. Porter (elevator doors only), 1101 Architects Bldg.  
 PITTSBURGH, PA., James R. Pitcairn, 1052 Century Bldg.  
 PORTLAND, ME., Edward A. Gillerin, 30 Cherry Road  
 PORTLAND, ORE., E. E. Gilmer, 316 S. E. Madison St.  
 PORTSMOUTH, OHIO, Earl C. Hayes & Co., 1042 So. 20th St.  
 POUGHKEEPSIE, N. Y., Hudson Valley Bldrs. Steel Co., 178 Cottage Street  
 READING, PA., John H. Millard, 8 S. 20th St.  
 RICHMOND, VA., J. S. Archer, 511 Atlantic Life Bldg.  
 ROANOKE, VA., A. L. Horwitz, 208 Boxley Bldg.  
 ROCHESTER, N. Y., E. W. Maurer, 703 Temple Bldg.  
 ROCKFORD, ILL., Capitol Ornamental Iron Works, 1012 Ninth St.  
 SALT LAKE CITY, UTAH, Manufacturers Spec. Co., 26 Exchange Bldg.  
 SAN ANTONIO, TEX., John A. Williamson Co., 804 Avenue A  
 SAN DIEGO, CALIF., Chas. H. Lentz, P. O. Box 727  
 SAN FRANCISCO, CALIF., Persons-Dwan & Co., 516 Call Bldg.  
 SAN JUAN, PUERTO RICO, Earl K. Burton, Inc.  
 SCRANTON, PA., Labar & Evans, 711 Linden St.  
 SEATTLE, WASH., Tourtellotte-Bradley, Inc., 401 White Bldg.  
 SHREVEPORT, LA., The Meriwether Co., 1312 Jordan St.  
 SIOUX CITY, IOWA, Otto F. Bridge, 513 Jackson St.  
 SOUTH BEND, IND., Builders Agency, 1809 E. Fox St.  
 ST. LOUIS, MO., Lasar Mfg. Co., 16th & O'Fallon Sts.  
 ST. PAUL, MINN., Builders Engr. Co., 2694 University Ave.  
 SYRACUSE, N. Y., B. R. Johnson, 145 Harding Place  
 TAMPA, FLA., Stovall & Archer, 805 Peninsular Telephone Bldg.  
 TOLEDO, OHIO, S. L. Everitt, 619 Edison Bldg.  
 TUCSON, ARIZ., Construction Service Co., 423 N. Fort St.  
 TULSA, OKLA., Murray R. Womble, 316 Atco Bldg.  
 UTICA, N. Y., American Hard Wall Plaster Co., 728 Broad St.  
 WASHINGTON, D. C., Wm. E. Gambrill & Co., 410 Bond Bldg.  
 WICHITA, KANS., C. L. Anderson, P. O. Box 1143  
 WILMINGTON, DEL., J. Francis Blaine, Inc., 25th St. near Broom  
 WORCESTER, MASS., Haskins-Haire Wire Works, 9 May St.  
 YOUNGSTOWN, OHIO, G. A. Doeright, Jr., 355 E. Wood St.